

#17



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PCT!

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/019,980B

DATE: 05/19/2003

TIME: 15:05:18

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\05192003\J019980B.raw

3 <110> APPLICANT: Berthelsen, Jens  
 4 Toma, Salvatore  
 5 Isacchi, Antonella  
 W--> 6 <120> TITLE OF INVENTION: Tankyrase Homolog Protein (THP), Nucleic Acids, And Methods  
 Related To  
 W--> 7 The Same  
 W--> 8 <130> FILE REFERENCE: PHRM0373  
 W--> 9 <140> CURRENT APPLICATION NUMBER: 10/019,980B  
 C--> 10 <141> CURRENT FILING DATE: 2003-01-06  
 11 <150> PRIOR APPLICATION NUMBER: 09/350,982  
 12 <151> PRIOR FILING DATE: 1999-07-09  
 13 <150> PRIOR APPLICATION NUMBER: PCT/EP00/06609  
 14 <151> PRIOR FILING DATE: 2000-07-03  
 W--> 15 <160> NUMBER OF SEQ ID: 10  
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 22 <223> OTHER INFORMATION: PCR Primers  
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 42 <213> ORGANISM: Homo sapiens  
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 45 <222> LOCATION: (1124)..(1124)  
 46 <223> OTHER INFORMATION: N is any nucleic acid  
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 49 <221> NAME/KEY: misc\_feature  
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 51 <223> OTHER INFORMATION: N is any nucleic acid  
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 56 cgcgagcgcc gcgccgagg ccgtggagcc ggccgccga gagctgttcg aggcgtgccg 120  
 58 caacggggac gtggaacgag tcaagaggct ggtgacgctt gagaaggatga acagccgcga 180  
 60 cacggcgggc aggaaatcca ccccgctgca cctcgccga ggttttgggc ggaaagacgt 240  
 62 agttgaatat ttgcttcaga atgggtgcaa tgtccaagca cgtgatgatg ggggccttat 300  
 64 tcctcttcat aatgcatgct cttttggtca tgcgaagta gtcaatctcc ttttgcgaca 360  
 66 tgggtgcagac cccaatgctc gagataattg gaattatact cctctccatg aagctgcaat 420  
 68 taaaggaaag attgatgttt gcattgtgct gttacagcat ggagctgagc caaccatccg 480  
 70 aaatacagat ggaaggacag cattggattt agcagatcca tctgccaaag cagtgcctac 540  
 72 tgggtgaatat aagaaagatg aactcttaga aagtgccagg agtggcaatg aagaaaaaat 600  
 74 gatggctcta ctcacacat taaatgtcaa ctgccacgca agtgatggca gaaagtcaac 660  
 76 tccattacat ttggcagcag gatataacag agtaaaagatt gtacagctgt tactgcaaca 720  
 78 tggagctgat gtccatgcta aagataaaag tgatctggta ccattacaca atgcctgttc 780  
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 86 tatagacttg gctcccacac cacagttaaa agaaagatta gcatatgaat ttaaaggcca 1020  
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 92 atctccatat cccaaaagaa agcaaatatg tgaactgttg ctaagaaaag gagcaamcat 1200  
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 114 tacaccttta catgaagcag cagcaaaagg aaaatatgaa atttgcaaac ttctgctcca 1860  
 116 gcatggtgca gaccctacaa aaaaaaacag gtagggaaat actcctttgg atcttggtta 1920  
 118 agatggagat acagatatctc aagatctgct taggggagat gcagctttgc tagatgctgc 1980  
 120 caagaagagt tgttttagcca gagtgaagaa gttgtcttct cctgataatg taaattgccg 2040  
 122 cgatacccaa ggcagacatt caacaccttt acatttagca gctggttata ataatttaga 2100  
 124 agttgcagag tatttggtac aacacggagc tgatgtgaat gcccaagaca aaggaggact 2160  
 126 tattccttta cataatgcag catcttacgg gcatgtagat gtagcagctc tactaataaa 2220  
 128 gtataatgca tgtgtcaatg ccacgggaaa atgggctttc acacctttgc acgaagcagc 2280  
 130 ccaaaaggga cgaacacagc tttgtgcttt gktgctagcc catggagctg acccgactct 2340  
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 134 tctgacagca gccatgcccc catctgctct gccctcttgt tacaagcctc aagtgtctca 2460  
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 142 agtagatttt agcataactc aattcgtaag gnatcttgga cttgagcacc taatggatat 2700  
 144 atttgagaga gaacagatca ctttggtatg attagttgag atggggcaca aggagctgaa 2760  
 146 ggagattgga atcaatgctt atggacatag gcacaaacta attaaaggag tcgagagact 2820  
 148 tatctccgga caacaaggct ttaaccata ttttaactttg aacacctctg gtagtggaa 2880  
 150 aattcttata gatctgtctc ctgatgataa agagtttcag tctgtggagg aagagatgca 2940

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Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\05192003\J019980B.raw

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154 tattctcaag attcagaagg tttgtaacaa gaaactatgg gaaagatata ctcaccggag 3060
156 aaaagaagtt tctgaagaaa accacaacca tgccaatgaa cgaatgctat ttcattgggtc 3120
158 tcctttttgtg aatgcaatta tccacaaagg ctttgatgaa aggcattgctg acataggtgg 3180
160 tatgttttggg gctggcattt attttgctga aaactcttcc aaaagcaatc aatatgtata 3240
162 tggaatttggg ggaggtactg ggtgtccagt tcacaaagac agatcttggt acatttgcca 3300
164 caggcagctg ctcttttgcc gggtaacctt gggaaagtct ttcctgcagt tcagtgcatt 3360
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170 tacttaccag attatgaggc ctgaagggtat ggtcgatgga taaatagtta ttttaagaaa 3540
172 ctaattccac tgaacctaaa atcatcaaag cagcagtggc ctctacgttt tactcctttg 3600
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180 aacagagtta acttgaacct tttatatggt atgcattgat tctaacaac tgtaatgccc 3840
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184 aatacaattt catttgtaaa actgtaaata agagcttttg tactagccca gtatttattt 3960
186 acattgcttt gtaataataa tctgttttag aactgcagcg gtttacaaaa tttttcata 4020
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232 1 5 10 15

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234	gcg gcc gag gcc gtg gag ccg gcc gcc cga gag ctg ttc gag gcg tgc	96
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238	cgc aac ggg gac gtg gaa cga gtc aag agg ctg gtg acg cct gag aag	144
239	Arg Asn Gly Asp Val Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys	
240	35 40 45	
242	gtg aac agc cgc gac acg gcg ggc agg aaa tcc acc ccg ctg cac ctc	192
243	Val Asn Ser Arg Asp Thr Ala Gly Arg Lys Ser Thr Pro Leu His Leu	
244	50 55 60	
246	gcc gca ggt ttt ggg cgg aaa gac gta gtt gaa tat ttg ctt cag aat	240
247	Ala Ala Gly Phe Gly Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn	
248	65 70 75 80	
250	ggt gca aat gtc caa gca cgt gat gat ggg ggc ctt att cct ctt cat	288
251	Gly Ala Asn Val Gln Ala Arg Asp Asp Gly Glu Leu Ile Pro Leu His	
252	85 90 95	
254	aat gca tgc tct ttt ggt cat gct gaa gta gtc aat ctc ctt ttg cga	336
255	Asn Ala Cys Ser Phe Gly His Ala Glu Val Val Asn Leu Leu Leu Arg	
256	100 105 110	
258	cat ggt gca gac ccc aat gct cga gat aat tgg aat tat act cct ctc	384
259	His Gly Ala Asp Pro Asn Ala Arg Asp Asn Trp Asn Tyr Thr Pro Leu	
260	115 120 125	
262	cat gaa gct gca att aaa gga aag att gat gtt tgc att gtg ctg tta	432
263	His Glu Ala Ala Ile Lys Gly Lys Ile Asp Val Cys Ile Val Leu Leu	
264	130 135 140	
266	cag cat gga gct gag cca acc atc cga aat aca gat gga agg aca gca	480
267	Gln His Gly Ala Glu Pro Thr Ile Arg Asn Thr Asp Gly Arg Thr Ala	
268	145 150 155 160	
270	ttg gat tta gca gat cca tct gcc aaa gca gtg ctt act ggt gaa tat	528
271	Leu Asp Leu Ala Asp Pro Ser Ala Lys Ala Val Leu Thr Gly Glu Tyr	
272	165 170 175	
274	aag aaa gat gaa ctc tta gaa agt gcc agg agt ggc aat gaa gaa aaa	576
275	Lys Lys Asp Glu Leu Leu Glu Ser Ala Arg Ser Gly Asn Glu Glu Lys	
276	180 185 190	
278	atg atg gct cta ctc aca cca tta aat gtc aac tgc cac gca agt gat	624
279	Met Met Ala Leu Leu Thr Pro Leu Asn Val Asn Cys His Ala Ser Asp	
280	195 200 205	
282	ggc aga aag tca act cca tta cat ttg gca gca gga tat aac aga gta	672
283	Gly Arg Lys Ser Thr Pro Leu His Leu Ala Ala Gly Tyr Asn Arg Val	
284	210 215 220	
286	aag att gta cag ctg tta ctg caa cat gga gct gat gtc cat gct aaa	720
287	Lys Ile Val Gln Leu Leu Leu Gln His Gly Ala Asp Val His Ala Lys	
288	225 230 235 240	
290	gat aaa ggt gat ctg gta cca tta cac aat gcc tgt tct tat ggt cat	768
291	Asp Lys Gly Asp Leu Val Pro Leu His Asn Ala Cys Ser Tyr Gly His	
292	245 250 255	
294	tat gaa gta act gaa ctt ttg gtc aag cat ggt gcc tgt gta aat gca	816
295	Tyr Glu Val Thr Glu Leu Leu Val Lys His Gly Ala Cys Val Asn Ala	
296	260 265 270	
298	atg gac ttg tgg caa ttc act cct ctt cat gag gca gct tct aag aac	864

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302 agg gtt gaa gta tgt tct ctt ctc tta agt tat ggt gca gac cca aca      912
303 Arg Val Glu Val Cys Ser Leu Leu Leu Ser Tyr Gly Ala Asp Pro Thr
304      290      295      300
306 ctg ctc aat tgt cac aat aaa agt gct ata gac ttg gct ccc aca cca      960
307 Leu Leu Asn Cys His Asn Lys Ser Ala Ile Asp Leu Ala Pro Thr Pro
308 305      310      315      320
310 cag tta aaa gaa aga tta gca tat gaa ttt aaa ggc cac tcg ttg ctg      1008
311 Gln Leu Lys Glu Arg Leu Ala Tyr Glu Phe Lys Gly His Ser Leu Leu
312      325      330      335
314 caa gct gca cga gaa gct gat gtt act cga atc aaa aaa cat ctc tct      1056
315 Gln Ala Ala Arg Glu Ala Asp Val Thr Arg Ile Lys Lys His Leu Ser
316      340      345      350
W--> 318 ctg gaa atg gtg aat ttc aag cat cct caa aca cat gaa aca gca ntg      1104
319 Leu Glu Met Val Asn Phe Lys His Pro Gln Thr His Glu Thr Ala Xaa
320      355      360      365
322 cat tgt gct gct gca tct cca tat ccc aaa aga aag caa ata tgt gaa      1152
323 His Cys Ala Ala Ala Ser Pro Tyr Pro Lys Arg Lys Gln Ile Cys Glu
324      370      375      380
326 ctg ttg cta aga aaa gga gca amc atc aat gaa aag act aaa gaa ttc      1200
327 Leu Leu Leu Arg Lys Gly Ala Xaa Ile Asn Glu Lys Thr Lys Glu Phe
328 385      390      395      400
330 ttg act cct ctg cac gtg gca tct gag aaa gct cat aat gat rtt gtt      1248
331 Leu Thr Pro Leu His Val Ala Ser Glu Lys Ala His Asn Asp Xaa Val
332      405      410      415
334 gaa gta gtg gtg aaa cat gaa gca aag gtt aat gct ctg gat aat ctt      1296
335 Glu Val Val Val Lys His Glu Ala Lys Val Asn Ala Leu Asp Asn Leu
336      420      425      430
338 ggt cag act tct cta cac aga gct gca tat tgt ggt cat cta caa acc      1344
339 Gly Gln Thr Ser Leu His Arg Ala Ala Tyr Cys Gly His Leu Gln Thr
340      435      440      445
342 tgc cgc cta ctc ctg agc tat ggg tgt gat cct aac att ata tcc ctt      1392
343 Cys Arg Leu Leu Leu Ser Tyr Gly Cys Asp Pro Asn Ile Ile Ser Leu
344      450      455      460
346 cag ggc ttt act gct tta cag atg gga aat gaa aat gta cag caa ctc      1440
347 Gln Gly Phe Thr Ala Leu Gln Met Gly Asn Glu Asn Val Gln Gln Leu
348 465      470      475      480
350 ctc caa gag ggt atc tca tta ggt aat tca gag gca gac aga caa ttg      1488
351 Leu Gln Glu Gly Ile Ser Leu Gly Asn Ser Glu Ala Asp Arg Gln Leu
352      485      490      495
354 ctg gaa gct gca aag gct gga gat gtc gaa act gta aaa aaa ctg tgt      1536
355 Leu Glu Ala Ala Lys Ala Gly Asp Val Glu Thr Val Lys Lys Leu Cys
356      500      505      510
358 act gtt cag agt gtc aac tgc aga gac att gaa ggg cgt cag tct aca      1584
359 Thr Val Gln Ser Val Asn Cys Arg Asp Ile Glu Gly Arg Gln Ser Thr
360      515      520      525
362 cca ctt cat ttt gca gct ggg tat aac aga gtg tcc gtg gtg gaa tat      1632
363 Pro Leu His Phe Ala Ala Gly Tyr Asn Arg Val Ser Val Val Glu Tyr

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RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 1124,2672

Seq#:4; N Pos. 1102,2650

Seq#:4; Xaa Pos. 368,392,415,558,559,764,884

Seq#:5; Xaa Pos. 368,392,415,558,559,764,884

## VERIFICATION SUMMARY

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Input Set : A:\PTO.VSK.txt

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L:6 M:283 W: Missing Blank Line separator, <120> field identifier  
L:8 M:283 W: Missing Blank Line separator, <130> field identifier  
L:9 M:283 W: Missing Blank Line separator, <140> field identifier  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:15 M:283 W: Missing Blank Line separator, <160> field identifier  
L:17 M:283 W: Missing Blank Line separator, <210> field identifier  
L:21 M:283 W: Missing Blank Line separator, <220> field identifier  
L:32 M:283 W: Missing Blank Line separator, <220> field identifier  
L:43 M:283 W: Missing Blank Line separator, <220> field identifier  
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1080  
M:341 Repeated in SeqNo=3  
L:211 M:283 W: Missing Blank Line separator, <220> field identifier  
L:224 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:217  
L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1056  
M:341 Repeated in SeqNo=4  
L:531 M:283 W: Missing Blank Line separator, <220> field identifier  
L:669 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:352  
M:341 Repeated in SeqNo=5  
L:881 M:283 W: Missing Blank Line separator, <220> field identifier  
L:892 M:283 W: Missing Blank Line separator, <220> field identifier  
L:903 M:283 W: Missing Blank Line separator, <220> field identifier  
L:914 M:283 W: Missing Blank Line separator, <220> field identifier  
L:925 M:283 W: Missing Blank Line separator, <220> field identifier